

Small Unit Remote Scouting System



Description

The Small Unit Remote Scouting System (SURSS) is a family of low cost (reusable and expendable) sensor systems providing organic situational awareness directly to the small unit maneuver and support commanders. The SURSS family of sensors will have an aerial, hand-emplaced and munitions delivered component. The aerial component is the only funded element of the program. The Dragon Eye (DE) Unmanned Aerial Vehicle (UAV) is the materiel solution for the aerial component. (The hand-emplaced and munition delivered initiatives will compete in the FY 08 POM.) Dragon Eye is typically employed at the battalion level and below to provide “over-the-hill” day and night reconnaissance. These UAVs can be quickly assembled and launched in about 10 minutes. The UAV operates autonomously (without operator input) after launch and transmits video imagery of the tactical situation, in near-real time, at a range of up to 10 kilometers (line of sight). The UAV’s route of flight is typically pre-programmed on the ground, but the route can be changed in-flight by the operator. Dragon Eye weighs 6 lbs., has a 45” wingspan, and is powered by two battery-operated motors that achieve speeds of approximately 35

mph at altitudes of 300 to 500 feet above the ground. The vehicle, which is bungee-launched by two Marines, flies its route using Global Positioning Satellite data for navigation. The system is man-portable, and can be recovered and reused.

Operational Impact

The mission of the SURSS is to provide day/night reconnaissance/surveillance of tactical objectives and danger areas beyond the unit’s line of sight, and relay this information in near-real time directly to the supported unit. Dragon Eye is also used in the urban environment, providing information that a battalion could previously gather only by patrolling or outpost activities, thus saving Marine lives and resources.

Ten pre-production prototypes were used by I MEF during Operation Iraqi Freedom (OIF) I. In response to feedback from the operating forces, 35 systems (105 UAVs) were sent to I MEF for OIF II. Due to limited resources (and survivability as a primary concern), DE was most often employed as a battalion asset. DE was operated almost entirely from stationary positions and proved most effective for route and point reconnaissance, and patrol and checkpoint support in urban areas.

Program Status

The program is in the Production and Deployment Phase. Initial operational capability was achieved in Iraq in May 2004. The acquisition objective is 467 systems.

Procurement Profile: FY 05 FY 06

Quantity: 40 83

Developer/Manufacturer

Production Contractor:

AeroVironment, Inc., Monrovia, CA